

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-011352**Date Inspected:** 14-Jan-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Joe Alaniz was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

OBG Assembly Yard

6BW+6CW

Flux Core Arc Welding (FCAW) welding was performed on weld joint 001 located at OBW6A on cross beam side of segment. Welder is identified as Mr. Zhang Hanming (220066). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2213-U2-FCM-1

CB5

Flux Core Arc Welding (FCAW) welding was performed on weld joint 001 located at CA202A-005. Welder is identified as Mr. Chen Zhenghua (220067). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2232-Tc-U5-F.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

6AW+6BW

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 001 located at OBW6 on counter weight side of segment. Welder is identified as Mr. Dai Lu (048659). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-3G (3F)-Repair-1.

Y Location of repairs areas by above noted welder (048659) are located at 65mm and 410mm.

5BE+5CE

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 008 located at OBE5 deck plate weld splice. Welder is identified as Mr. Du Hengyou (037743). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-1G (1F)-FCM-Repair-1 and CWR #1045 repair procedure.

Y Location of repairs areas by above noted welder (037743) is located at 9360.

NDT Observation

This QA Inspector observed ZPMC Magnetic Particle (MT) Technician performing MT on various locations in the trial assembly yard. Locations are as followed:

5BW

1. Excavation areas on deck to edge plate weld on cross beam side of segment. Y locations of excavations and numbers of MT Indications observed are as followed:

Y locations are 13000mm (1 MT transverse indication observed) and 14030mm (5 MT transverse indications observed).

6AW+6BW

1. Excavation areas on edge to edge plate splice weld on counter weight side of segment. Y locations of excavations and numbers of MT Indications observed are as followed:

Y locations are 770mm (3 MT transverse indications observed), 65mm and 410mm.

5BE

During the Quality Assurance in-process observations of the fabrication of lift 5 East, This QA Inspector performed Magnetic Particle (MT) testing at the excavated areas that had been previously tested and accepted by ZPMC MT technician and discovered 3 transverse crack present at Y locations 8270mm~8850mm. This QA Inspector issued an incident report for the noted issue.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (134-8257-0045), who represents the Office of Structural Materials for your project.

Inspected By:	Alaniz,Joe	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer
